### **DOCTORAL DEGREE REGULATIONS**

# Wageningen University 2025

These regulations will enter into force on 1 April 2025



#### **TABLE OF CONTENTS**

General prov	risions	3
Article 1	Definitions and general provisions	3
Article 2	Introductory provisions	3
The PhD can	didate	5
Article 3	Requirements PhD candidate	5
The Go / No	Go	6
Article 4	The Go / No Go assessment	6
The promoto	r and co-promotor	7
Article 5	Qualifications and tasks of the promotor	7
Article 6	Qualifications and tasks of the co-promotor	8
The thesis co	ommittee	9
Article 7	Composition and operation of the thesis committee	9
Appointment	of the (co-)promotor	10
Article 8	Appointment of promotor and co-promotor	10
Evaluation of	f the thesis and the propositions	11
Article 9	Evaluation by the promotor	11
Article 10	Evaluation of the propositions by the Academic Board	12
Article 11	Evaluation of the thesis by the opponents	12
The thesis ar	nd the propositions	13
Article 12	Contents of the thesis and the propositions	13
Article 13	Structure and design of the thesis	14
Article 14	Language of the thesis and the propositions	14
Article 15	Printing/reproduction and distribution of the thesis	14
The public defence		16
Article 16	The doctoral defence ceremony	16
Article 17	Conferring the doctorate and the degree certificate	16
The designat	ion <i>cum laude</i>	18
Article 18	The designation cum laude	18
Settling disp	utes	19
Article 19	Settling disputes	19
Article 20	Complaint handling procedure	19
Article 21	Objection procedure	19
Honorary do	ctorate	21
Article 23	Honorary doctorate	21
Final provision	ons	22

Arti	cle 24	Final provisions	22
Apper	idices:		23
	Append	lix 1 Attainment targets for the PhD degree (doctorate)	24
	Append	lix 2 Language requirements	25
	Append	lix 3 Design, format, reproduction and distribution of the thesis	26
	Append	lix 4 Criteria for acceptance of propositions	35
	Append	lix 5 Thesis evaluation	36
	Append	lix 6 Protocol for the doctoral defence ceremony	50
		lum appendix 6 Deviations from the Doctoral Degree Regulations national or international force majeure situations	in 54
	Append	lix 7 Regulations for conferring a joint, double or dual doctorate	55
	Append profess	lix 8 Procedure and format request ius promovendi associate ors	64

#### **General provisions**

This document contains the English translation of the Dutch version of the Doctoral Degree Regulations. In case of discrepancies between the English translation and the Dutch text, the Dutch text prevails.

#### <u>Article 1 Definitions and general provisions</u>

#### 1.1 Definitions

As used in these regulations, the following terms are defined below:

- Act: The Higher Education and Research Act.
- Regulations: these Doctoral Degree Regulations, including the corresponding appendices.
- Doctoral defence ceremony: the occasion on which the public defence of the thesis and the propositions takes place and a doctorate degree may be conferred to the candidate.

The other terms appearing in these regulations have the same meaning as those same terms from the Act.

#### 1.2

When these regulations refer to a promotor or co-promotor, if reference is made to more than one promotor or co-promotor, this should be read as: promotors or co-promotors.

#### <u>Article 2 Introductory provisions</u>

#### 2.1

At Wageningen University, the doctorate can be conferred based on the basis of the doctoral defence ceremony. These regulations provide the way in which this degree is conferred

#### 2.2

The Academic Board confers the doctorate subject to the provisions in the Act and in these regulations.

#### 2.3

At Wageningen University, a joint doctorate can be obtained based on the doctoral defence ceremony.

#### 2.4

The Academic Board confers the joint doctorate together with one or more bodies authorised to confer the doctorate, of one or more partner institutes, on the basis of the Act, these regulations and agreements made with the partner institute(s).

#### 2.5

For a joint doctorate, prior written permission must be received from the Academic Board before the start of the PhD programme.

#### 2.6

Appendix 7 of these regulations contains additional regulations on the joint doctorate.

#### 2.7

The Academic Board adopts these Doctoral Degree Regulations after acquiring approval from the Executive Board.

#### The PhD candidate

#### Article 3 Requirements PhD candidate

#### 3.1

To qualify for the doctoral defence ceremony:

- a. based on the provisions in Article 7.10a, first, second or third paragraph of the Act, the candidate must have earned the degree of Master at an institute of academic education which is recognised by the Academic Board;
- as proof of the ability to perform as an independent practitioner of science, the candidate must have written a thesis and/or created a technological design;
- c. must have written at least six and no more than eight propositions; and
- d. must have satisfied the other requirements in these regulations.

#### 3.2

In exceptional cases, the Academic Board can grant a doctorate to individuals who have satisfied the provisions in the first paragraph under b, c and d, but have not satisfied the provision in that clause under a.

#### 3.3

The PhD candidate must have demonstrable proficiency in English, and in Dutch as well if the thesis is written in Dutch, at the level established by the Academic Board as described in Appendix 2.

#### The Go / No Go

#### Article 4 The Go / No Go assessment

#### 4.1

At least 8 and no more than 15 months after the registered start date of the PhD candidate, the progress of the PhD candidates will be assessed by the (co)promotors, on the basis of which the Academic Board decides whether the PhD candidate can continue the PhD programme (Go) or not (No Go). In the latter case, the PhD programme ends for the PhD candidate and deregistration from the university takes place. Part of the assessment is whether the PhD candidate can reasonably achieve successful completion within the duration of the study programme.

#### 4.2

The Academic Board may deviate from the provisions of the previous paragraph with reason.

#### The promotor and co-promotor

#### Article 5 Qualifications and tasks of the promotor

#### 5.1

The promotor has the task of supervising the PhD candidate and is responsible for the supervision. The promotor ensures that the thesis satisfies the requirements pursuant to these regulations.

#### 5.2

For each individual PhD candidate, the Academic Board appoints a supervision team consisting of any of the following combinations of supervisors:

- a. at least one promotor, with a maximum of four promotors, where appropriate together with no more than three co-promotors, provided that:
- b. the first promotor will be affiliated to Wageningen University,
- c. the total number of promotor(s) and co-promotor(s) will not exceed four, and
- d. if four promotors and co- promotors with an affiliation to Wageningen University are to be appointed, their affiliations need to be with at least two different chair groups of Wageningen University with a maximum of two supervisors from each group

#### 5.3

- 1. Qualified to be appointed as a promotor by the Academic Board are:
- a. a professor at Wageningen University or at another accredited university (with the exception of an honorary professor), who has the right to act as promotor (ius promovendi) by virtue of art. 7.18 paragraph 4 of the Act;
- b. an associate professor 1 at Wageningen University, either within the Tenure Track system or promoted to this rank under the Academic Career Framework, who holds ius promovendi by virtue of a general decision of the Academic Board;
- c. an associate professor 1 at Wageningen University who is not an associate professor 1 as referred to in subparagraph b above, and who has ius promovendi by virtue of a separate decision of the Academic Board;
- d. an associate professor 2 at Wageningen University who has ius promovendi by virtue of a separate decision of the Academic Board.
- 2. Decisions of the Academic Board as referred to in subparagraphs 1c and d above shall be taken at the request of the associate professor concerned, and subject to the criteria and procedure described in Appendix 8.
- 3. Those who have been awarded ius promovendi at another accredited university can act as second promotor at Wageningen University.

#### 5.4

The right to act as a promotor for persons as referred to in Article 5.3 under a and b, is awarded by the academic board to staff members for the duration of their appointment at Wageningen University.

#### 5.5

Honourably discharged professors and persons to be appointed as a promotor on the basis of Article 5.3 under a and under b will retain the right to act as promotors for candidates for whom they were already appointed as the intended promotor, for five years after their discharge.

#### 5.6

The academic board has the right to withdraw the ius promovendi with immediate effect from a staff member if it sees compelling reasons to do so. Appointments already made will also discontinue, unless in individual cases the Academic Board decides otherwise. In these individual cases, the person will retain the appointment as a promotor for up to five years after the right to act as a promotor has ended.

#### 5.7

Individuals who have a family relationship with the PhD candidate or have a relationship with the PhD candidate that might impair their independent judgement, do not qualify for the position of promotor.

#### 5.8

Individuals who have a family relationship with other promotors or co-promotors or who are in such a relationship with each other that it might impair their independent judgement, are not eligible for the position of promotor.

#### Article 6 Qualifications and tasks of the co-promotor

#### 6.1

The co-promotor supervises the PhD candidate together with the promotor. The co-promotor assesses whether the thesis satisfies the requirements pursuant to these regulations and advises the promotor in this matter.

#### 6.2

With due observance to Article 5.2, the Academic Board may be requested by the promotor to appoint a maximum of three co-promoters. Appointment of more than three co-promotors is not possible.

#### 6.3

The co-promotor is employed as a member of scientific staff, not necessarily at Wageningen University, and has earned a doctorate at an accredited university.

#### 6.4

Individuals who have a family relationship with the PhD candidate or have a relationship with the PhD candidate that might impair their independent judgement, do not qualify for the position of co-promotor.

#### 6.5

Individuals who have a family relationship with other co-promotors or promotors, or who are in such a relationship with each other that it might impair their independent judgement, do not qualify for the position of co-promotor.

#### The thesis committee

#### Article 7 Composition and operation of the thesis committee

#### 7.1

The Academic Board appoints a thesis committee for every doctoral defence ceremony.

#### 7.2

The composition of the thesis committee is as follows:

- a. as chairperson, the rector magnificus in the capacity as chairperson of the Academic Board, or the deputy of the rector magnificus;
- b. the appointed promotor(s) and co-promotor(s), including at least one promotor who is (or recently was, as meant in Article 5.4 and 5.5) employed at Wageningen University;
- c. four opponents, as further described in Article 7.4, of whom at least one is (or recently was, as meant in Article 5.5) employed by Wageningen University and has the ius promovendi as described in Article 5.3.

#### 7.3

In the case of a joint doctorate with a defence that takes place at WU, the composition of the thesis committee may be deviated from if the partner university(s) so requests, as long as the requirements described in paragraph 7.2 under a, b and c are met.

#### 7.4

Professors or individuals who have earned doctorates and are sufficiently qualified to be a member of the thesis committee, according to the Academic Board, can be appointed as opponents;

- a. Opponents and the chairperson must not be affiliated with or employed by the chair group of the PhD candidate or the chair group of one of the promotors or co-promotors.
- b. They may not have a family relationship or a relationship with the PhD candidate, promotors and co-promotors that might impair their independent judgement.
- c. They may not be a co-author in any of the thesis chapters.

#### 7.5

The chairperson cannot vote.

The members referred to under clause 2 sub b jointly have a single vote, the other members as referred to in clause 2 sub c have one vote per person.

#### **Appointment of the (co-)promotor**

#### Article 8 Appointment of promotor and co-promotor

#### 8.1

Immediately at the start of a PhD study, the Academic Board appoints the promotor(s) and possibly (at the request of the promotor(s)) a co-promotor(s).

#### 8.2

If needed, either the promotor or the PhD candidate can request the appointment of a different promotor(s) during the PhD programme by the Academic Board.

#### 8.3

Preceding the final appointment, the Academic Board can provide a hearing to the PhD candidate, the proposed promotor(s) and co-promotor(s).

#### 8.4

Both the PhD candidate and the appointed (co-)promotor(s) must approve the appointment. By approving the appointment, the (co-)promotor(s) accept the applicability of these regulations.

#### **Evaluation of the thesis and the propositions**

#### <u>Article 9 Evaluation by the promotor</u>

#### 9.1

The PhD candidate submits the thesis and the propositions to the promotor for evaluation.

#### 9.2

In the evaluation of the thesis and the propositions, the promotor takes the recommendation of the co-promotor into account.

#### 9.3

The evaluation of the thesis takes place by reviewing it in accordance with the requirements in these regulations, especially regarding the requirements in Articles 12 through 14 and 18, as well as the attainment targets established by the Academic Board as set down in Appendix 1.

#### 9.4

The evaluation of the propositions takes place by reviewing them according to the requirements in Articles 12.3, 14.1 and 14.3, and according to general principles of morality and decency.

#### 9.5

If the promotor determines that the thesis and the propositions have satisfied the requirements, the promotor approves the thesis and the propositions.

#### 9.6

The promotor (or primary promotor if there is more than one) informs (digitally) the Academic Board and the PhD candidate about this approval. This approval is not a final decision, but a recommendation to the Academic Board.

#### 9.7

The Academic Board, taking account of the approval of the thesis and the propositions by the promotor, decides to appoint the thesis committee.

#### 9.8

The PhD candidate has the right to respond to the decision as referred to in Article 11.5 and/or to amend the thesis for the purpose of resubmission. The PhD candidate submits the response and/or the amended thesis to the promotor. If the promotor judges the amended thesis and/or the response defendable, the promotor approves the amended thesis and/or the response.

#### Article 10 Evaluation of the propositions by the Academic Board

#### 10.1

After being approved by the promotor, the propositions are submitted to the Academic Board for evaluation.

#### 10.2

The Academic Board decides whether the propositions meet the requirements set in Articles 12.3 and 14.3.

#### Article 11 Evaluation of the thesis by the opponents

#### 11.1

After being approved by the promotor, the thesis is submitted to the opponents, who have been appointed for this purpose.

#### 11.2

Within six weeks after receiving the thesis as approved by the promotor, the opponents decide whether or not the thesis has provided sufficient proof of competency in the independent practice of science to allow the PhD candidate to publicly defend the thesis. A positive decision requires a positive evaluation of all opponents.

#### 11.3

The decision referred to in Article 11.2 is based on a review of the thesis with respect to the attainment targets formulated by the Academic Board, which have been listed in Appendix 1 and in Articles 12.1, 12.2 and 18 (cum laude).

#### 11.4

On behalf of the thesis committee, the Dean of Research will inform the candidate and the promotor of the decision of the thesis committee in (digital) writing. If the thesis committee has decided that the PhD candidate is not allowed to defend the thesis, the reasons for this decision will be explained.

#### 11.5

In case the thesis committee judges the thesis to be not defendable, the PhD candidate has the right to improve the thesis and/or to write a response only once. If the promotor determines that the thesis and/or the response have satisfied the requirements, the promotor will approve the amended thesis and/or the response. If the thesis committee maintains its judgement that the thesis is not defendable, the PhD candidate can restart the evaluation procedure six months after the final decision.

#### The thesis and the propositions

#### Article 12 Contents of the thesis and the propositions

#### 12.1

The thesis can be:

- a. a scientific treatment concerning a specific topic;
- b. a number of distinct scientific treatments which already may have been published (partially or entirely), if they display sufficient coherence with respect to a specific topic; this coherence is to be demonstrated by the inclusion of a general introduction and general discussion; or
- c. a technological design, comprised of a drawing created with the help of appropriate theoretical knowledge and methodologies from the relevant field, accompanied by a scientific explanation and documentation.

#### 12.2

The thesis is intended as proof of the competency of the PhD candidate to conduct independent scientific research.

#### 12.3

At least six and no more than eight propositions are added to the thesis. Two of the propositions concern the topic of the thesis or the technological design, two to four propositions concern a different scientific field or science in general and two propositions concern a socially relevant topic. Propositions are concisely worded positions taken by the PhD candidate that are formulated in such a way that they can be debated at a scientific level and consist of one sentence.

#### 12.4

A distinct scientific treatment, as referred to in Article 12.1 under b, which has been written by the PhD candidate in cooperation with others, can be part of the thesis only if the PhD candidate has provided a significant contribution and if the portion for which the PhD candidate is primarily responsible is clearly indicated in the thesis for each individual chapter.

#### 12.5

The use of generative Artificial Intelligence ('GenAI') tools for generating or improving research questions, research design, text or figures contained in the PhD thesis should be clearly described and justified for each individual chapter in the thesis.

#### 12.6

The thesis can be written by one individual, or by two or three individuals together. The individuals who have written a thesis together must satisfy the following conditions:

- a. all authors are PhD candidates, each of whom satisfies the provisions and procedures in these regulations;
- b. the PhD candidates have at least one promotor in common;
- c. in the thesis, the portions for which each PhD candidate is primarily responsible are clearly indicated;
- d. each PhD candidate adds the prescribed number of propositions to the thesis;
- e. all PhD candidates must defend their thesis on the same day at Wageningen University.

#### Article 13 Structure and design of the thesis

#### 13.1

The structure and design of the thesis must satisfy the corresponding guidelines established by the Academic Board, which are included in these regulations as Appendix 3.

#### 13.2

It is not allowed to include advertising or logos in the thesis or on the cover. If a thesis is the result of a joint PhD programme and if the partner university requires so, logos of both universities may be presented on the cover and/or first title page.

#### 13.3

If the PhD research has been made possible in part by support, financial or otherwise, from outside the university, this must be reported in the thesis according to the guidelines referred to in Article 13.1.

#### 13.4

Sections which fall beyond the scope of the scientific treatment in the strictest sense can only be added to the thesis with permission from the Academic Board. Statements regarding religion or politics are not allowed, other than those related to the acknowledgement of the support the PhD candidate has received.

#### Article 14 Language of the thesis and the propositions

#### 14.1

The thesis is written in English. Upon request from the PhD candidate, the Academic Board can give permission to write the thesis in Dutch.

#### 14.2

The thesis contains a summary in English. One or two summaries in other languages are allowed. A thesis written in Dutch, contains a Dutch summary and an English summary that also provides a translation of the thesis title in English.

#### 14.3

The propositions are formulated in the same language as that in which the thesis is written.

#### Article 15 Printing/reproduction and distribution of the thesis

#### 15.1

Before the thesis is printed or reproduced in any other fashion:

- a. the thesis committee must have decided that the PhD candidate can be allowed to defend the thesis;
- b. the cover, the four title pages and the page opposite the end leaf must be approved by the Academic Board. To this end, the PhD candidate must submit copies of these pages for approval to the Doctoral Service Center; and
- c. the printer's proof of the thesis and the propositions must be approved in writing by the promotor, where the promotor takes the standards in or pursuant to these regulations into account.

#### 15.2

In the guidelines that are included in these regulations as Appendix 3, the Academic Board determines the following:

- a. the number of copies of the thesis that, preceding the public defence, must be provided to the Academic Board;
- b. the number of copies of the thesis that the PhD candidate must supply at cost to the Wageningen University library, in consultation with the Executive Board; and
- c. the way in which an electronic version of the thesis must be provided.

#### The public defence

#### Article 16 The doctoral defence ceremony

#### 16.1

The defence of the thesis and the propositions takes place in public in the presence of the thesis committee.

#### 16.2

The public ceremony is chaired by the rector magnificus as chairperson of the Academic Board, or the deputy.

#### 16.3

The time and place of the public ceremony are determined by the Academic Board following consultation with the PhD candidate and promotor. The PhD candidate must submit a request for a time and place well in advance.

#### 16.4

The Academic Board adopts the protocol of the public ceremony. The standard protocol is included in these regulations as Appendix 6.

#### 16.5

The PhD candidate defends the thesis and the propositions for a period of 45 minutes; during this defence, the candidate is opposed by the thesis committee and all other individuals who have been granted permission by the Academic Board. A request for permission to oppose the PhD candidate during the defence must be submitted to the Academic Board at least one week before the date of the doctoral defence ceremony.

#### 16.6

The public ceremony is conducted in English unless the PhD candidate has submitted a written request to conduct the defence in Dutch and all members of the thesis committee are able to discuss it in Dutch.

#### Article 17 Conferring the doctorate and the degree certificate

#### 17.1

During a private meeting that takes place immediately following the thesis defence, the thesis committee, on behalf of the Academic Board, decides whether or not to confer the doctorate, based on the thesis, the propositions and the defence.

#### 17.2

A decision to withhold conferral of the doctorate on the grounds of the PhD candidate's defence must be based on the negative judgement of three of the voting members of thesis committee. The members are not allowed to abstain from voting.

#### 17.3

Following the private meeting of the thesis committee, the chairperson reopens the public meeting and announces the decision of the thesis committee.

#### 17.4

As proof of conferral of the doctorate, the PhD candidate receives a degree certificate. The degree certificate is signed on behalf of the Academic Board by the rector magnificus or the deputy of the rector magnificus, the promotor(s), if relevant, the co-promotor(s) and by the PhD candidate.

#### 17.5

If a decision has been made to confer the doctorate *cum laude*, then this is listed on the degree certificate.

#### The designation cum laude

#### Article 18 The designation cum laude

#### 18.1

If the PhD candidate has shown exceptional competency in the independent practice of science, the Academic Board can confer the doctorate cum laude (with distinction).

#### 18.2

If the evaluation of the thesis by the thesis committee gives reason to do so, the Academic Board immediately submits the thesis to two independent experts and requests them to make a recommendation about the proposal to confer the designation cum laude in an explanatory letter. The experts must be full professors, but not at Wageningen University, and must not have been involved in any way in the doctoral research in question. At least one of the experts must be affiliated with a university outside the Netherlands. With the request to the experts, a proposal from the promotor (as referred to in Article 18.3) or a letter from the promotor in support of the assessment by the thesis committee will be sent.

#### 18.3

Concomitantly with submission of the thesis, the promotor can submit a written proposal to the Academic Board to confer the degree with the designation cum laude. This document must explain the reasons for the proposed designation and will be forwarded to all members of the thesis committee.

#### 18.4

Only if at least one of the experts advised positively, the Academic Board informs the thesis committee about the submitted proposal and calls a closed meeting of the thesis committee immediately preceding the defence ceremony. During this meeting, the thesis committee discusses the possible designation *cum laude*.

#### 18.5

The thesis committee makes a decision about the proposal to confer the designation *cum laude* on behalf of the Academic Board during the closed meeting referred to in Article 17.1. The proposal will be approved if no member of the committee votes against it and if no more than one member of the committee abstains from voting. If one of the two consulted experts has made a negative recommendation, the proposal can be accepted only if there is a unanimous decision of the committee.

#### **Settling disputes**

#### Article 19 Settling disputes

#### 19.1

The provisions of the General Administrative Law Act (Awb) apply.

#### 19.2

The regulations concerning the conferral of a doctorate do not apply to legal disputes.

#### Article 20 Complaint handling procedure

#### 20.1

An interested party can submit a request for mediation or complaint handling to the Academic Board in case of a dispute that concerns the behaviours or decisions of promotors, co-promotors, the Academic Board itself, or individuals who are acting on behalf of the Academic Board. Mediation does not suspend the term referred to in Article 21.1. In consultation with the party submitting the request, the chairperson of the Academic Board provides mediation or complaint handling in accordance with Chapter 9 of the General Administrative Law Act.

#### Article 21 Objection procedure

#### 21.1

An interested party can object to decisions made by or on behalf of the Academic Board within six weeks after the person concerned is informed of the decision, by submitting a notice of objection in an explanatory letter to the Academic Board or to the Advisory Committee for Objections.

#### 21.2

If the objection is submitted to the Academic Board, the Academic Board forwards the notice of objection to the Advisory Committee for Objections of Wageningen University.

#### 21.3

The Advisory Committee for Objections acts in accordance with the provisions in Article 7.13 of the General Administrative Law Act.

#### 21.4

The Advisory Committee for Objections allows the parties concerned to be heard. The person who took the contested decision, or another representative of the Academic Board, is invited to the hearing and will be given the opportunity to provide an explanation of the contested decision or point of view of the Academic Board.

#### 21.5

The Advisory Committee for Objections issues a written advice to the Academic Board. The advice includes a report of the hearings.

#### 21.6

Within 12 weeks after receiving the notice of objection, the Academic Board makes its decision about the objection. The decision shall be duly substantiated and shall be communicated in writing to the party who submitted the notice of objection and the other parties involved in the objection procedure.

#### 21.7

If the decision on the objection deviates from the advice issued by the Advisory Committee, the letter about the decision explains the reasons for this deviation, and the Advisory Committee advice is included.

#### 21.8

Within six weeks after receiving the decision referred to in Article 21.6, an interested party can appeal to the competent Dutch court against this decision.

#### 21.9

The "Wageningen University Regulations Governing the Advisory Committee for Objections" apply to this objection procedure. The aforementioned Advisory Committee will advise the Academic Board on an objection.

#### **Honorary doctorate**

#### Article 23 Honorary doctorate

#### 23.1

Upon nomination by the Executive Board, the Academic Board is authorised to award the degree *doctor honoris causa* (honorary doctorate) to an individual in recognition of outstanding accomplishments. This doctorate is conferred by and in the presence of the Academic Board in a manner which is determined by this Board.

#### 23.2

The other provisions in these regulations do not apply to the conferral of an honorary doctorate.

#### **Final provisions**

#### Article 24 Final provisions

In all cases not covered by these regulations, the Academic Board will make a decision on the matter.

These regulations were determined by the Academic Board of Wageningen University on 22 01 2025 and approved by the Executive Board of Wageningen University on 24 02 2025.

#### **Appendices:**

- 1. Attainment targets of the doctorate
- 2. Language requirements
- 3. Guidelines for structure, design and distribution of the thesis
- 4. PhD candidate's authorship statement
- 5. Thesis evaluation form with rubric
- 6. Protocol for the doctoral defence ceremony
- 7. Regulations for conferring a joint, double or dual doctorate
- 8. Procedure and format request ius promovendi for others than associate professors 1 in Tenure Track

#### **Appendix 1 Attainment targets for the PhD degree (doctorate)**

The recipient of the doctorate is capable of:

- 1. functioning as an independent practitioner of science who is able to:
  - a. formulate scientific questions, either based on social issues or scientific progress;
  - b. conduct original scientific research; and
  - c. publish articles in peer-reviewed scientific journals, publish books with scientific publishers or make a technical design;
- 2. integrating the research in, or placing it within the framework of, their own scientific discipline and against the background of a broader scientific area;
- 3. placing the research aims and research results in a societal context;
- 4. postulating concisely worded propositions in scientific and societal areas, formulated in such a way that they are subject to opposition and defence.

#### **Appendix 2 Language requirements**

To be admitted to the PhD programme, the PhD candidate must demonstrate proficiency in the English language, as well as the Dutch language if the thesis is written in Dutch, at the level established by the Academic Board.

Proficiency in Dutch is defined as having passed the final exam in Dutch for preuniversity education in the Netherlands, as shown by possession of a VWO diploma or comparable certificate.

PhD candidates need to submit an internationally recognized Certificate of Proficiency in the English Language if they:

- are not Dutch;
- come from a non-Anglophone country;
- have not completed a Master's degree with English as the language of instruction, or a Bachelor or Master degree from a Dutch University or Dutch university of applied science (HBO).

This certificate must be submitted before the start of the PhD project and prior to registration at Wageningen University, as it is required for the university's PhD registration system<sup>123</sup>.

The recognised certificates and the minimum required scores can be found here: https://www.wur.nl/en/education-programmes/master/practical-information-masters/admission-requirements-master/english-language-proficiency-msc.htm

In a situation where promotors have reasons to allow a PhD candidate who does not yet meet the requirements to come to Wageningen University, they must request permission for this from the Dean of Research by means of a letter with motivation that is enclosed with the documents for the PhD registration. This letter must accompany the PhD registration documents.

<sup>&</sup>lt;sup>2.</sup> In this situation the candidate has three months to meet the proficiency requirements.

<sup>3.</sup> Test results may not be older than 24 months at the moment of application.

#### Appendix 3 Design, format, reproduction and distribution of the thesis

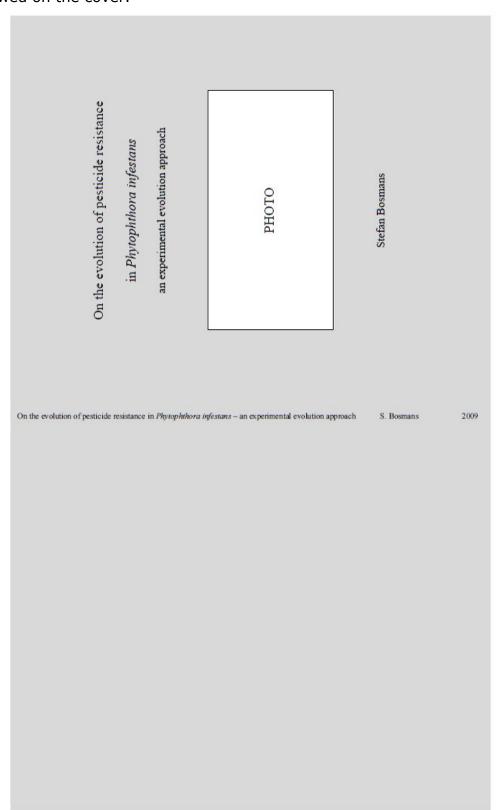
Appendices 3a through 3d show how the thesis should appear regarding its cover (3a), required title pages (3b), acknowledgements of financial support (3c) and the propositions (3d).

Any deviation from these examples requires prior permission from the Academic Board.

Two weeks before the public defence, the first promotor sends the printed copy of the thesis to the opponents, the deputy rector chairing the defence, and the Doctoral Service Center, and the library. In addition, a pdf file (including the propositions immediately after the cover) and an abstract in Word format is also sent to the Library.

#### **Appendix 3a Cover**

Logos on the cover are not allowed, except in the case of a joint degree, see appendix 7. No text other than the title, candidate's name and calendar year are allowed on the cover.



Example of a cover

#### First title page

# The Phytophthora infestans avirulence gene X5yz and its potato counterpart A6 Piet A. Ardappel

#### **Second title page**

Professors with personal or special chairs must be explicitly indicated as such in the list of promotors. Their affiliation must also be listed.

The list of co-promotors must state their positions and affiliations.

The affiliation of WUR promotors and co-promotors consists of their position (for chair holders "professor of", for personal professors "professor in" and for special professors "special professor in"), basic organisational unit (chair group or business unit) plus Wageningen University & Research as main affiliation. The other members (the opponents) are listed with their main affiliations.

Affiliations outside the Netherlands must also include the name of the country.

#### Thesis committee

#### **Promotors**

Prof. Dr *ir.* F. Pietersen Professor in Phytopathology Wageningen University & Research

Prof. Dr *ir.* F. Swartjes Professor of Phytopathology Wageningen University & Research

#### **Co-promotor**

Dr ir. P.A. Willis

Associate professor in Animal Nutrition Wageningen University & Research

#### Other members

Prof. Dr W.J. Stekels, Wageningen University & Research

Dr P. de Groot, University of Amsterdam

Dr A. de Bruin, Keygene N.V., Wageningen

Dr P. van Oost, University of Aberdeen, UK

This research was conducted under the auspices of the Graduate School Experimental Plant Sciences

#### Third title page

Note that on this page 'Wageningen University' is used because that is the legal entity that issues the doctorate.

# The *Phytophthora infestans* avirulence gene *X5yz* and its potato counterpart *A6*

Piet A. Ardappel

#### **Thesis**

submitted in fulfilment of the requirements for the degree of doctor at Wageningen University
by the authority of the Rector Magnificus,
Prof. Dr C. Kroeze,
in the presence of the
Thesis Committee appointed by the Academic Board
to be defended in public
on Wednesday 1 February 2025
at 3.30 p.m. in the Omnia Auditorium.

et A. Ardappel
ne <i>Phytophthora infestans</i> avirulence gene X5yz and its potato counterpart A6, 3 pages.
nD thesis, Wageningen University, Wageningen, the Netherlands (2017) ith references, with summary in English
ttps://doi.org/10.18174/123456

## **Appendix 3c PhD candidate's authorship statement** (second to last page of the thesis)

#### Aim of the authorship statement

The authorship statement is included in the thesis manuscript to allow opponents to judge the candidate's contribution to (chapters in) the thesis. A PhD study is a learning process, so candidates are not supposed to have it done all by themselves. The promotor may have come up with the research question, for example, or suggested text improvements. Perhaps for example an MSc student did an experiment under the candidate's guidance.

In the authorship statement, the use of generative Artificial Intelligence ('GenAI') should also be included.

#### Focus on the candidate's own contribution

While it may be needed to mention what others did, in particular when the candidate is not the first author of a chapter, the statement should focus on the candidate's own contribution. Therefore, the text is written in the first person. The text must be concise, maximum 1 page A4, about 500 words. If there are authorship statements on chapters that were already submitted or published as paper, these may be re-used in this authorship statement. Items to address in the research chapters are usually: research question,

Items to address in the research chapters are usually: research question, methodology, research and data collection, data analysis, text and graphs, and the final discussion. For other chapters or for other types of research, the items to address may differ.

#### **Example of an Authorship Statement to be included in the thesis**

#### **Authorship statement**

Chapter 1 General introduction. The general research question and its general scientific and social perspective were proposed by my promotor. I delineated the research question, described how it fits in the current scientific literature and described its potential social impact. I revised the text two times, after comments of my co-promotor.

#### Chapter 2 . . .

Chapter 3 Heat resistance of ice-cream. I contributed to defining the research question, proposed the methodology and the experimental design, carried out the experiments together with an MSc student whom I supervised, and did the data analysis together with the student and a statistician. The student wrote the first draft (therefore, I am second author) and revised it after the comments of myself (which were quite many) and the other co-authors.

#### Chapter 4

I contributed to defining the research question, proposed the methodology and the experimental design, carried out the experiments together with an MSc student whom I supervised, and did the data analysis together with the student and a statistician. In this chapter, I have used ChatGPT to provide language support, and to enhance the clarity of the text. I am fully responsible for the final content and interpretation of the research. I have used Open AI. (2023). ChatGPT (April 20 version) [Large language model]. <a href="https://chat.openai.com/">https://chat.openai.com/</a> text in my chapter. ......

#### Chapter 5 . . .

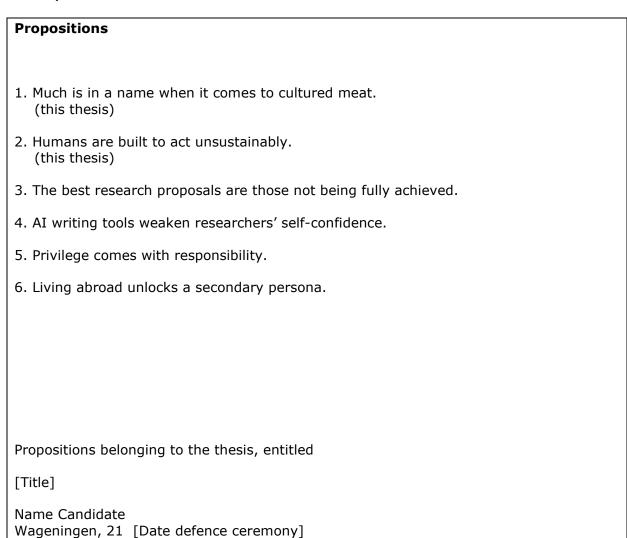
Chapter 6 General discussion. I wrote the first draft of the text after just one discussion with my copromotor on the subjects and arguments to be included. I revised the text once, after comments of my promotor and co-promotor.

(This is a fictional example)		
Printed by <name company="" printing=""> on FSC-certified paper <optional></optional></name>		
Cover design by <name designer=""></name>		
Financial support from Wageningen University and <name financier=""> for printing this thesis is gratefully acknowledged.</name>		
The research described in this thesis was financially supported by <name financer="">.</name>		
The receased described in this thesis was financially supported by kname financers		
Acknowledgments of the cover designer and printing company are optional.		
Logos are not allowed, except the FSC logo if the thesis is printed on FSC-certified paper.		
Logos are not allowed, except the ESC logo if the thesis is printed on ESC-		

**Appendix 3d – acknowledgements of financial support** (last inside page of

thesis)

## **Appendix 3e – propositions** (as a separate leaflet and in Pdf immediately after cover)



#### Appendix 4 - Criteria for acceptance of propositions

Please check Articles 12.3, 14.1, 14.3 and Appendices 1 and 3e of the Doctoral Degree Regulations for additional information

#### What is a proposition?

A proposition is a statement which has the property of being either true or false, and as such are essentially controversial, disputable and debatable.

#### Criteria of acceptance of a proposition:

- The proposition can be seen as being either true or false.
- One must be able to debate it at a scientific level.
- The proposition should be controversial and disputable. It must be itchy, can be uncomfortable but is not offending.
- The proposition must be original.
- The proposition is according to the general principles of morality and decency.
- The proposition may not deal with (discuss or debate):
  - the existence or truth of God, Allah, beliefs or religions as one cannot scientifically reason these;
  - a person (e.g. character, personality). Note it may deal with the view or policy that a person advocates;
  - o the King/Queen of any country.
  - The proposition may not be a conclusion (from the thesis).
- The proposition should:
  - o be formulated in an absolute manner;
  - be formulated in a positive manner (avoiding words with a negative annotation);
  - consist of one sentence (concisely worded / preferably no more than 10-15 words);
  - be formulated in a simple manner (unambiguously, clear for a large audience);
  - not have more than one issue to be debated;
  - not include arguments.
- The following phrasing are not allowed in propositions:
  - o "Must", "Can", "Could", "Should", or "Would" statements
- Citations should be avoided in propositions but when explicitly required (to avoid plagiarism) they should be stated in the following manner:
  - The citation between single quotation marks with a footnote code and the author and year in brackets after the citation.
  - The footnote is placed below all the propositions with the reference to the paper or book cited.

Example: 'Man serves the interests of no creature except himself' (Orwell, 2021)<sup>1</sup> is the main explanation for climate change.\*

<sup>&</sup>lt;sup>1</sup> Orwell, G. 2021. Animal Farm. Collins Classics. London, England: William Collins.

<sup>\*</sup>Proposition from thesis" Shaping meat analogues: ingredients & texture" from Miek Schlangen

#### **Appendix 5 Thesis evaluation:**

Quality standards for PhD theses vary internationally, including evaluation processes and grades like cum laude (with distinction). At Wageningen University, detailed guidelines on these processes are provided. In Appendix 5a, information is available on the two rubrics used for thesis evaluation. Appendix 5b outlines the evaluation procedure and gives instructions for giving feedback, to which opponents can be referred to. Appendices 5c, 5d, and 5e contain the evaluation form and two types of rubrics, ensuring transparency for PhD candidates and their supervisors (co-promotors).

## Appendix 5a: Difference between rubric for assessment of disciplinary and multidisciplinary research, and rubric for assessment of interdisciplinary and transdisciplinary research

Doctoral theses can be mainly disciplinary, multidisciplinary, interdisciplinary and/or transdisciplinary. There are two rubrics available:

- a rubric for the assessment of mainly disciplinary and multidisciplinary PhD research (appendix 5d);
- a rubric for the assessment of mainly interdisciplinary and transdisciplinary PhD research (appendix 5e).

The main criteria for the rubrics are the same, but in the operationalisation of the criteria in the rubric in appendix 5e puts a relatively heavier weight on the level of integration achieved between different bodies of knowledge and the extra effort and skills that were demonstrated to achieve this, and puts – compared to the rubric in appendix 5d- relatively less weight on the expected scientific impact of the research chapters in the dissertation.

The promotor decides after consultation with the candidate under which category the thesis is submitted to the examining committee, and thus which rubric is going to be used by the thesis committee.

The rubric for the assessment of <u>disciplinary</u> and <u>multidisciplinary</u> research is targeted at dissertations that either:

 consist mainly of research chapters that each belong to the same discipline, usually involving a supervisory team that is relatively homogeneous in terms of the scientific backgrounds/disciplines included.

#### or:

- consist mainly of disciplinary research chapters that belong to several disciplines, usually involving a supervisory team that is heterogeneous in terms of the scientific backgrounds/disciplines included.

The rubric for the assessment of <u>interdisciplinary</u> and <u>transdisciplinary</u> research is targeted at dissertations that either:

 attempt mainly to connect and integrate questions, concepts, theoretical frameworks, methodologies and/or findings from different scientific disciplines, possibly leading to the breaking of boundaries between disciplines and the formation of new domains of science, and usually involving a supervisory team that is heterogeneous in terms of the scientific backgrounds/disciplines included.

#### or:

 report mainly on research that is based on active engagement with nonacademic groups during part of the research process - usually with the aim of addressing real-life societal challenges - whereby the knowledge and understanding of stakeholders is connected to and integrated with scientific understanding. Appendix 5b Evaluation process of PhD theses at Wageningen University At Wageningen University, PhD theses are evaluated based on five key criteria using a standard evaluation form and a rubric. The rubric ensures consistency in assessments and facilitates discussions among evaluators, including examiners and the (co-)promotor(s) (supervisors). Additionally, it provides clarity to PhD candidates about the expectations for their thesis.

#### **Evaluation Process and Criteria**

- **Criteria:** Each row of the rubric corresponds to a specific criterion, such as the originality of the research.
- **Grading Levels:** Each column represents a grading level (e.g., 'good'), with detailed descriptions for each criterion at each level.
- Assessment: Evaluators are encouraged to begin at the lowest level and move up to see if the thesis meets the descriptors of the higher levels. Achievements described at lower levels are assumed at higher levels and are not repeated.

#### Feedback and Comments

Evaluators are asked to provide comments on each of the five criteria in 25 to 100 words, comparing the thesis to the rubric descriptors. These comments are crucial for providing constructive feedback and supporting the evaluation process.

#### **Handling Varying Scores**

A thesis may receive different scores across the criteria. For example, it could be rated 'unacceptable' for one criterion and 'good' for another. If the thesis receives an 'unacceptable' for one of the first four criteria, it is deemed not defendable, and detailed feedback should be provided to help the candidate revise the thesis.

#### Role of the Thesis Evaluation

The evaluation report is submitted in to Hora Finita, where it is used to determine if the PhD candidate can proceed to defend the thesis. Additionally, the evaluation plays a role in deciding whether the thesis should be considered for *cum laude* distinction. In such cases, two additional reviewers will assess the thesis. After the public defence, the committee will meet to discuss the thesis and defence quality, using anonymized evaluation reports.

#### Anonymity of Evaluations

The anonymized evaluation report is shared with the (co-)promotor(s) in specific cases:

- If the thesis is deemed 'unacceptable,' the report is shared to allow for improvements and revisions.
- After the defence, the report serves as feedback for the (co-)promotor(s) on the quality of the thesis and future expectations.

#### **Recommendations for Minor Corrections**

If the thesis is deemed defendable, only minor corrections (grammatical, formatting, etc.) should be suggested. These corrections are forwarded to the (co-)promotor(s) for possible incorporation by the candidate.

#### Requirements for the Doctoral Degree at Wageningen University

To be awarded a doctoral degree, candidates must demonstrate:

- 1. Scientific Independence: The ability to formulate scientific questions, conduct original research, and publish in peer-reviewed journals or produce a technical design.
- 2. Integration of Research: The capacity to integrate their research within their discipline and the broader scientific context.
- 3. Societal Relevance: The ability to place their research within a societal framework.
- 4. Propositions: The ability to formulate concise, defendable propositions in both scientific and societal areas.

This structured approach ensures a thorough and consistent evaluation of PhD theses, preparing candidates to contribute meaningfully to their field of study.

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#### Appendix 5c Thesis evaluation form in Hora Finita





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sess manuscript			
		available for download below. Your assessment can be entered in the separate boxes on this page. The comments made in the box for textual ors shortly after you've submitted your comments. The anonymized assessment as a whole will be treated confidentially and will only be shar	
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n the case of a negative access	mont a robuttal amendura	will be initiated. In this procedure the candidate will be requested to rewrite (parts of) the thesis based on your anonymized comments.	
		twill be initiated, in this procedure the candidate will be requested to rewrite (parts of) the thesis based on your anonymized comments, the revised document. For further information on this procedure please contact graduation.dsc@wur.nl.	
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Assessments based on review p		taking sure to use the correct rubric: <b>Disciplinary &amp; Multidisciplinary theses</b> . The rubric can be <u>found here</u> .	
Assessments based on review p		taking sure to use the correct rubric: Disciplinary & Multidisciplinary theses. The rubric can be <u>found here</u> .	

40

Motivation (minimum 10 words) *
Maximum of 100 words
Scientific quality of the research chapters *
○ Unacceptable ○ Acceptable ○ Satisfactory ○ Good ○ Very good ○ Excellent
Motivation (minimum 10 words) *
Maximum of 100 words
Reflection on the research as shown in the Introduction and General discussion *
○ Unacceptable ○ Acceptable ○ Satisfactory ○ Good ○ Very good ○ Excellent
Motivation (minimum 10 words) *
Maximum of 100 words
Quality of written presentation *
Should you have suggestions for the PhD candidate / supervisor regarding grammatical, formatting and minor errors, you can include these in this box. If your suggestions do not qualify as such, PhD Office is not allowed to forward the information to the supervisor. Upon receiving suggestions, the supervisor will confer with the PhD candidate whether or not to incorporate your suggestions in the thesis.
○ Unacceptable ○ Acceptable ○ Satisfactory ○ Good ○ Very good ○ Excellent
Motivation (minimum 10 words) *
Maximum of 100 words

Let op: e-mails worden alleen verstuurd naar de domeinen: fargeau.nl, test-fargeau.nl, srv\*.mail-tester.com. Alle andere e-mails worden bezorgd op: wur@test-fargeau.nl

Overall Assessment *	
○ Unacceptable ○ Acceptable ○	Satisfactory
Motivation (minimum 10 words	s) *
Maximum of 100 words	
<ul> <li>Your assessment considering the manu</li> </ul>	script as a whole
Please state your assessment and mo	ptivation for the manuscript as a whole.
	Explanation  If you identify some grammatical, formatting and/or minor errors, but still are of the opinion that the manuscript as a whole qualifies for approval, then you can choose for "approved" and state your findings for minor adjustments in the motivation box "Quality of written presentation". If the necessary adjustments are such that the PhD candidate cannot continue in the process, you choose for rejected.
assessment <sup>e</sup>	Oapproved
	Orejected

#### Appendix 5d Rubric for evaluation of disciplinary and multidisciplinary PhD theses

	Unacceptable	Acceptable	Satisfactory	Good	Very good	Excellent
1. Originality of the research	Does not make (or has not made) a contribution to any discipline, either because it is a copy, or nearly so, of work done before by others, or because the research question is trivial.	Makes (or has made) a small and not very original contribution to one of the disciplines involved, uses a cookbook approach, is not really interesting but shows the ability to do research.	Makes (or has made) a modest contribution to one of the disciplines involved by addressing relevant, but small and traditional questions that are interesting for those who work on the same subject.	part of normal science but does not open up the field.	contribution to one of the disciplines involved by solving old problems in a new way, or by addressing new and relevant questions, however without completely exploring and solving those new questions; or makes substantial contribution to more than one discipline (see 'good').	questions; <u>or</u> makes an important contribution to more than one discipline (see 'very good').
2.Scientific quality of	Less than three first- author research chapters	The thesis contains at least journal or by a reputable bo			thor and which are publishable these chapters.	e in a reputable scientific
search chapters see footnotes: 1, 2, 3	are of publishable quality in a reputable scientific journal or by a reputable book publisher.  Chapters are incoherent and choices and interpretations are mostly not convincing.  The chapters are not publishable in any reputable journal or by any reputable book publisher and are not expected to be cited nor have any scientific impact.  In case of a monograph, it is not likely to be cited nor have any scientific impact	interpretations are not always convincing.  The chapters are expected to be cited below the norm in the discipline(s) involved and have a lower than average scientific impact.  In case of a monograph, it is likely to be cited considerably below the norm in the discipline(s) involved and have	interpretations are mostly convincing.  Some chapters are expected to be cited in line with the norm in the discipline(s) involved and have an average scientific impact, while others are expected be cited below the norm and have a lower than average impact.  In case of a monograph, it is likely to be cited in line with or slightly below the norm in the discipline(s) involved and have at most an average scientific	Chapters are coherent and mostly well justified and convincing.  Most chapters are expected to be cited at least as well as the norm in the discipline(s) involved and have an average scientific impact. Some chapters are expected to be cited above the norm and have a higher than average scientific impact.  In case of a monograph, it is likely to be cited in line with or slightly above the norm in the discipline(s) involved and have at least an average scientific impact.	very convincing and some of them are thought provoking and exciting.  All chapters expected to be cited above the norm in the discipline(s) involved and have higher than average scientific impact and some will be cited substantially better than the norm and have a substantially higher than average scientific impact.  In case of a monograph, it is likely to be cited above the norm in the discipline involved and have a higher than average scientific	Chapters are very coherent and convincing, all are exciting and some of them ground-breaking.  All chapters are expected to be cited substantially better than the norm in the discipline(s) involved and will have a substantially higher than average scientific impact.  In case of a monograph, it is likely to be cited substantially above the norm in the discipline involved and have a scientific impact.

	Unacceptable	Acceptable	Satisfactory	Good	Very good	Excellent
3. Reflection on the research as shown in 'Introduction' and 'General discussion'	the added value of	Argument for conducting this disciplinary or multidisciplinary research is trivial; it is made plausible that the proposed disciplinary or multidisciplinary research lines can be interesting (in scientific and/or societal terms), but choices made remain arbitrary.	scientific and/or societal terms) for pursuing the proposed disciplinary or	There is a convincing argument of why it is relevant (in scientific and/or societal terms) to pursue the proposed disciplinary or multidisciplinary research lines.	is relevant (in scientific and/or societal terms) to pursue the proposed disciplinary or multidisciplinary research	There is a compelling, original and exciting argument of why it is relevant (in scientific and/or societal terms) to pursue the proposed disciplinary or multidisciplinary research lines.
	The work does not show how the results fit in existing knowledge, or what the societal relevance is.		results fit in the existing knowledge and what the	Obvious correspondences and conflicts with existing knowledge are identified. Most obvious societal relevance is indicated.	conflicts with existing knowledge are identified. Societal relevance is	Results are critically confronted with existing knowledge. Societal relevance is addressed in full.
	The results from the different chapters are not connected to each other in any way.	The results from the different chapters are connected to each other in a loose manner that is not very convincing.	different chapters are partially connected to each other in a manner that is	,	different chapters are fully connected to each other in a manner that is mostly	The results from the different chapters are fully connected to each other in a manner that is entirely convincing.
	Possible weaknesses in the research are not discussed.	The most obvious weaknesses in the research are indicated, but not how they affect the conclusions.		,	research are indicated, and also how they affect the	All weaknesses in the research are indicated, and also how they affect each of the conclusions.
4. Quality of the written presentation	Writing, tables, figures and layout are so poor that it is hard to understand what the candidate wants to say. Reading is very difficult.	layout are not always correct and clear, level of detail varies widely, but with effort the text is	detail varies, and text	be more concise. Tables,	layout are functional and flawless. Reading is a joy.	Writing is crystal clear and compelling, concise but balanced with sufficient detail, with attractive, functional tables, figures and layout. Reading is exciting.
	The thesis is unstructured, often information is missing or presented in the wrong place.	Main structure of the thesis is adequate, but placement and structure of sections are often not logical.	thesis is correct, placement and structure of	Main structure of the thesis is correct, but some sections are less well placed or less well structured.	sections are well structured and well placed.	structured with each

	Unacceptable	Acceptable	Satisfactory	Good	Very good	Excellent
5. Overall assessment	In case one of the five criteria is marked as 'unacceptable' by any of the opponents/ reviewers, the PhD candidate will not be allowed to defend the thesis without major revision.	Based on the above categories the overall quality of the thesis is considered acceptable. The PhD candidate will be allowed to defend the thesis.	Based on the above categories the overall quality of the thesis is considered satisfactory. The PhD candidate will be allowed to defend the thesis.	Based on the above categories the overall quality of the thesis is considered good. The PhD candidate will be allowed to defend the thesis.	Based on the above categories the overall quality of the thesis is considered very good. The PhD candidate will be allowed to defend the thesis.	Based on the above categories the overall quality of the thesis is considered excellent. This PhD thesis belongs to the top of the scientific field. This may be reason for awarding the designation 'cum laude' ('with distinction').4

<sup>&</sup>lt;sup>1</sup> The precise criteria for assessing quality may differ per discipline and type of research. Accordingly, quality criteria may relate to use of theory, research design, methods of data collection, analytical approaches, modelling, validation, conclusion and discussion. More general quality criteria in relation to such building blocks include depth of argumentation, justification of choices, creativity, clarity, sophistication and the level of coherence between the building blocks.

<sup>&</sup>lt;sup>2</sup> In the case of a design, please consider the originality of the design and the contribution to technology. Consider the candidate's technological competence, application of design methodologies, and analytical and integrative skills.

<sup>&</sup>lt;sup>3</sup> If the research chapters are multi-authored, it is important to consider the candidate's contribution to each chapter, in particular when s/he is not the first author. To this end, an authorship statement by the candidate has been added to the thesis manuscript. Also, it's good to check whether the research chapters show a level of written presentation similar to the Introduction and General discussion. If the research chapters are written in a better way, this may result in a higher grade for the criterion 'research chapters' but it suggests an important contribution of co-authors. Thus, a higher grade for the research chapters alone should perhaps not be reflected in the overall grade of the thesis

<sup>&</sup>lt;sup>4</sup> After the oral defence, the committee will be asked to comment on the quality of the defence. At that point the final decision whether or not to award a cum laude designation is made by anonymous voting.

### Appendix 5e Rubric for evaluation of interdisciplinary and transdisciplinary PhD theses

	Unacceptable	Acceptable	Satisfactory	Good	Very good	Excellent
1. Originality of the research	not made) a contribution to <b>either</b> the interdisciplinary field <b>or</b> transdisciplinary science, either because it is a copy, or nearly so, of work done before by	Makes (or has made) a small and not very original contribution to <b>either</b> the inter-disciplinary field <b>or</b> transdisciplinary science, uses a cookbook approach, is not really interesting but shows the ability to do research.	Makes (or has made) a modest contribution to either the interdisciplinary field or transdisciplinary science by addressing relevant, but small and traditional questions that are interesting for those who work on the same subject.	Makes (or has made) a substantial contribution to <b>either</b> the interdisciplinary field <b>or</b> transdisciplinary science by addressing relevant questions that are interesting for others within the field. It is a solid part of normal science but does not open up the field.	Makes (or has made) important contribution to <b>either</b> the interdisciplinary field <b>or</b> transdisciplinary science by solving old problems in a new way, or by addressing new and relevant questions, however without completely exploring and solving those new questions.	Makes (or has made) an exciting, major contribution to either the interdisciplinary field or transdisciplinary science, by solving old problems in a brilliant, innovative way or by asking and answering new and intriguing questions.
2. Scientific quality of the		The thesis contains at least t journal or by a reputable boo				in a reputable scientific
research chapters see footnotes: 1, 2, 3	scientific journal or by a	Chapters lack clear cohesion and choices and interpretations are not always convincing.	Chapters have sufficient cohesion and choices and interpretations are mostly convincing.	Chapters are coherent and mostly well justified and convincing.	Chapters are coherent, very convincing and some of them are thought provoking and exciting.	Chapters are very coherent and convincing, all are exciting and some of them ground-breaking.
1, 2, 3	Chapters are incoherent and choices and interpretations are mostly not convincing. The chapters are not publishable in any reputable journal or by any reputable book publisher and are not expected to be cited nor have a scientific impact.	Research chapters are expected to remain uncited or be cited, far below the norm in the inter- or transdisciplinary field of study involved and have a considerably lower than average scientific impact.	Some chapters are expected to be cited, but below the norm in the inter- or transdisciplinary field of study involved and have lower than average scientific impact.		Most chapters are expected to be cited at least as well as the norm in the inter- or transdisciplinary field of study involved and have an average scientific impact. Some chapters are expected to be cited above the norm and have a higher than average scientific impact.  In case of a monograph, it	to be cited above the norm in the inter- or transdisciplinary field of
	In case of a monograph,	In case of a monograph, it is likely to be cited far below the norm in the field of study involved and have a considerably lower than average scientific impact.	In case of a monograph, it is likely to be cited considerably below the norm in the field of study involved and have a lower than average scientific impact.	In case of a monograph, it is likely to be cited in line with or slightly below the norm in the field of study involved and have at most an average scientific impact.	is likely to be cited in line with or slightly above the norm in the field of study involved and have at least an average scientific impact.	In case of a monograph, it is likely to be cited well above the norm in the field of study involved and have a higher than average scientific impact.

	Unacceptable	Acceptable	Satisfactory	Good	Very good	Excellent
	Integration between different bodies of knowledge and understanding (within science or between science and society) is not achieved or discussed at the level of results in any chapter.	Integration between different bodies of knowledge and understanding (within science or between science and society) is loosely achieved or discussed at the level of results in one or two chapters but is not very convincing.	and society) is partially achieved or discussed at	Integration between different bodies of knowledge and understanding (within science or between science and society) is partially achieved or discussed at the level of results in three or four chapters and mostly convincing.	the level of results in three	science and society) is fully achieved or discussed
		combined within chapters demonstrates that candidate employed very little extra	Set of research approaches combined within chapters demonstrates that candidate employed modest amount of extra effort and skill to deliver this inter- or transdisciplinary thesis.	Set of research approaches combined within chapters demonstrates that candidate employed fair amount of extra effort and skill to deliver this inter-or transdisciplinary thesis.	approaches combined within chapters demonstrates that candidate employed high	Set of research approaches combined within chapters demonstrates that candidate employed very high amount of extra effort and skill to deliver this inter- or transdisciplinary thesis.
3. Reflection on the research as shown in 'Introduction' and 'General discussion'	There is no explanation of the added value of integrating different bodies of knowledge and understanding in this inter- or transdisciplinary research in either scientific or societal terms.	is trivial; it is made plausible	There is a reasonably plausible argument of why it is relevant (in scientific and/or societal terms) to integrate the different bodies of knowledge and understanding chosen in this inter- or transdisciplinary research.	There is a convincing argument of why it is relevant (in scientific and/or societal terms) to integrate the different bodies of knowledge and understanding chosen in this inter- or transdisciplinary research.	this inter- or transdisciplinary research.	There is a compelling, original and exciting argument of why it is relevant (in scientific and/or societal terms) to integrate the different bodies of knowledge and understanding chosen in this inter- or transdisciplinary research, and this may give rise to altogether new areas of study, collaboration and/or professionalism.
	The work does not show how the results fit in the existing inter- or transdisciplinary knowledge, or what the societal relevance is.	Trivial reflection on how results fit in the existing inter- or transdisciplinary knowledge and what the societal relevance is.	Narrow view on how results fit in the existing inter- or transdisciplinary knowledge and what the societal relevance is.	Obvious correspondences and conflicts with existing inter- or transdisciplinary knowledge are identified. Most obvious societal relevance is indicated, and in case of transdisciplinary research- there is already some evidence that non-academics build on	conflicts with existing inter- or transdisciplinary knowledge are identified. Societal relevance is mostly well indicated, and	Results are critically confronted with existing inter- or transdisciplinary knowledge. Societal relevance is addressed in full, and - in case of transdisciplinary research - there is clear evidence that non-academics build on findings to alter

	Unacceptable	Acceptable	Satisfactory	Good	Very good	Excellent
				the research findings.	or courses of action in society.	policies, designs or courses of action in society.
	The results from the different chapters are not connected to each other in any way.	The results from the different chapters are connected to each other in a loose manner that is not very convincing.	The results from the different chapters are partially connected to each other in a manner that is partially convincing.	The results from the different chapters are partially connected to each other in a manner that is mostly convincing.	The results from the different chapters are fully connected to each other in a manner that is mostly convincing.	The results from the different chapters are fully connected to each other in a manner that is entirely convincing.
	Possible weaknesses in the research are not discussed.	The most obvious weaknesses in the research are indicated, but not how they affect the conclusions.	Most weaknesses in the research are indicated, but less clearly how they affect the conclusions.	Most weaknesses in the research are indicated, and how they affect the main conclusions.	All weaknesses in the research are indicated, and how they affect the main conclusions.	All weaknesses in the research are indicated, and how they affect each of the conclusions.
4. Quality of the written presentation	Writing, tables, figures and lay-out are so poor that it is hard to understand what the candidate wants to say. Reading is very difficult.	Writing, tables, figures and lay-out are not always correct and clear, level of detail varies widely, but with effort the text is understandable. Reading is difficult.	Writing, tables, figures and lay-out are mostly adequate, but level of detail varies, and text could be more concise. Reading is laborious.	Writing is correct and mostly clear, but text could be more concise. Tables, figures and lay-out are mostly clear, with few errors. Reading is effortless.	Writing is clear and concise, tables, figures and lay-out are functional and flawless. Reading is a joy.	Writing is crystal clear and compelling, concise but balanced with sufficient detail, with attractive, functional tables, figures and lay-out. Reading is exciting.
	The thesis is unstructured, often information is missing or presented in the wrong place.	Main structure of the thesis is adequate, but placement and structure of sections are often not logical.	Main structure of the thesis is correct, placement and structure of sections are not logical in places.	Main structure of the thesis is correct, but some sections are less well placed or less well structured.	Main structure of the thesis is clear and correct, most sections are well structured and well placed.	The thesis is very well structured with each chapter and section having a clear function and-presented in a logical order.
5. Overall assessment	In case one of the five criteria is marked as 'unacceptable' by any of the opponents/ reviewers, the PhD candidate will not be allowed to defend the thesis without major revision.	Based on the above categories the overall quality of the thesis is considered acceptable. The PhD candidate will be allowed to defend the thesis.	Based on the above categories the overall quality of the thesis is considered satisfactory. The PhD candidate will be allowed to defend the thesis.	Based on the above categories the overall quality of the thesis is considered good. The PhD candidate will be allowed to defend the thesis.	Based on the above categories the overall quality of the thesis is considered very good. The PhD candidate will be allowed to defend the thesis.	Based on the above categories the overall quality of the thesis is considered excellent. This PhD thesis belongs to the top of the scientific field. This may be a reason for awarding the designation 'cum laude' ('with distinction').4

<sup>&</sup>lt;sup>1</sup> The precise criteria for assessing quality may differ per discipline and type of research. Accordingly, quality criteria may relate to use of theory, research design, methods of data collection, analytical approaches, modelling, validation, conclusion and discussion. More general quality criteria in relation to such building blocks include depth of argumentation, justification of choices, creativity, clarity, sophistication and the level of coherence between the building blocks.

<sup>&</sup>lt;sup>2</sup> In the case of a design, please consider the originality of the design and the contribution to technology. Consider the candidate's technological competence, application of design methodologies, and analytical and integrative skills.

<sup>&</sup>lt;sup>3</sup> If the research chapters are multi-authored, it is important to consider the candidate's contribution to each chapter, in particular when s/he is not the first author. To this end, an authorship statement by the candidate has been added to the thesis manuscript. Also, it's good to check whether the research chapters show a level of written presentation similar to the Introduction and General discussion. If the research chapters are written in a better way, this may result in a higher grade for the criterion 'research chapters' but it suggests an important contribution of co-authors. Thus, a higher grade for the research chapters alone should perhaps not be reflected in the overall grade of the thesis.

<sup>&</sup>lt;sup>4</sup> After the oral defence, the committee will be asked to comment on the quality of the defence. At that point the final decision whether or not to award a cum laude designation is made by anonymous voting.

#### Appendix 6 Protocol for the doctoral defence ceremony

#### Location

The Omnia Auditorium of Wageningen University Hoge Steeg 2, Wageningen

#### **General aspects**

The doctoral defence ceremony has a long tradition. It is the pinnacle in the practice of science, where newly developed ideas and concepts are discussed and defended, in a public and preferably international setting, between early stage and established scientists. Wageningen University aims for the PhD defence to be a highly dignified ceremony where science is discussed at the highest level and has, therefore, established this protocol.

The PhD candidate can be accompanied by at most two paranymphs. The paranymphs mainly have a ceremonial function by reading one of the propositions on request. In exceptional cases directed by the chair of the committee, the PhD candidate may consult the paranymphs. The opponents may only address the PhD candidate.

Four opponents need to be present at the defence ceremony. Only in exceptional cases, a public defence ceremony can take place with three opponents. If an opponent cannot attend, the promotor is responsible for finding a replacement. This must be another qualified scientist with a doctorate according to the requirements stated in article 7.4. One of the four opponents can question the candidate via a video connection on the condition that the opponent is not residing in the Netherlands. The Doctoral Service Center must be notified in time in the latter case. Only in exceptional cases, and with the specific permission of the Dean of Research, a second opponent may question the candidate via a video connection.

The ceremony is recorded and is accessible to the public in real-time at <a href="https://wur.yuja.com/Library">https://wur.yuja.com/Library</a>. A copy of the broadcast can be viewed and obtained via the same website. A video recording of the defence ceremony will be kept for three years and filed afterwards.

Wageningen University takes great care with recorded video material and complies with all legal requirements. At Wageningen University, <a href="https://www.wur.nl/en/download/Protection-of-Personal-Data-regulations-2017-2018.htm">https://www.wur.nl/en/download/Protection-of-Personal-Data-regulations-2017-2018.htm</a>, are in force, which is published on the website of Wageningen University.

#### **Conventions**

The focus of the ceremony is the practice of science. It is, therefore, inappropriate for the PhD candidate, paranymphs or members of the thesis committee to make any religious, political or nationalistic statements by means of words, gestures or in any other way, during and 30 minutes before the academic ceremony. Any other statements that do not show respect for the scientific and dignified character of the ceremony are also not permitted.

#### Terms of address <sup>2</sup>

Rector Magnificus (or substitute)
Candidate
Promotor
Co-promotor
Opponents

(Deputy) Rector / Chair Respected candidate Highly esteemed promotor Highly esteemed co-promotor Highly esteemed opponent

#### **Dress Code**

Dress Code

During the doctoral defence ceremony, the PhD candidate, paranymphs and the members of the thesis committee are expected to wear the following clothing:

- PhD candidate and paranymphs: Appropriate clothing, preferably white tie with black shoes and black socks or other formal clothing such as a formal dress or skirt.
- Thesis committee:
  - Full professors: gown and cap (of own university) with a white shirt and black skirt or black trousers with black shoes and socks or a black dress.
  - Other members: formal clothing (tenue the ville), a formal dress or skirt in subdued colours or a dark suit with black shoes and socks.

#### **Schedule**

- 30 minutes before the start of the academic session

The thesis committee meets in the committee room in the Omnia Building, where the Rector Magnificus explains the procedure, and opposition questions, propositions and time allocation are discussed. If an opponent will be present at the ceremony via a video connection, she/he will join this meeting via another video connection.

PhD candidate, paranymphs and beadle meet in the reception room. The audience is seated in the auditorium.

- 15 minutes before the start of the academic session
  The beadle strikes the floor one time with the mace and escorts the PhD
  candidate and the paranymphs to the podium in the auditorium.
  The PhD candidate gives a brief presentation of the PhD research (max 14 min).
  The paranymphs are seated on the podium, in front at either side of the
  candidate.
- 2 minutes before the start of the academic session

The beadle strikes the floor three times with the mace and escorts the thesis committee to the podium in the main auditorium in ceremonial procession led by the Beadle then the Rector Magnificus followed by the promotor(s) and copromotor(s) and then the opponents in order of opposition.

Thesis committee members take their seats on the podium or join via a video connection.

The Rector Magnificus and the promotor/co-promotor(s) are seated at the table on the right-hand side of the podium (as seen from the auditorium). The first promotor is seated left from the Rector Magnificus, and the second promotor and/or co-promotor(s) on the right-hand side of the Rector.

<sup>&</sup>lt;sup>2</sup> Normally the thesis defence ceremony is conducted in English and the titles and texts spoken by the Rector Magnificus and supervisor included in this appendix apply. See Article 16.6 for the rules regarding the language of defence. The titles and texts used in a defence ceremony that is conducted in Dutch, can be found in Annex 7 of the Dutch version of these Doctoral Degree Regulations, "Promotiereglement Wageningen University".

The other members of the thesis committee take their seats at the table on the left-hand side of the podium (as seen from the auditorium), in the order in which they will oppose the PhD candidate, with the first opponent seated closest to the public.

The Beadle leaves the auditorium.

#### - Start of the academic session

The Rector Magnificus opens the meeting by the strike of the gavel and begins the ceremony with the words:

"I hereby open this ceremony, convened by the Academic Board of Wageningen University, in which <name of PhD candidate> is offered the opportunity of defending a thesis, with propositions, entitled '<title of thesis>'. The defence will take place before a thesis committee appointed by the Academic Board as a prerequisite for conferring the degree of doctor. Good morning/afternoon. I would like to welcome you all to this graduation. My name is <name>. I am professor of <name chair> and representing the Academic Board and the Rector Magnificus today."

The Rector Magnificus gives the floor to the first opponent but first introduces the opponent with the words:

"I call on the first examiner, < name and affiliations of the opponent>." The Rector Magnificus introduces each subsequent member of the thesis committee in a similar manner.

The opponents ask their questions and discuss their issues with the PhD candidate during the time that is allocated to them, which is monitored by the Rector Magnificus.

#### - 45 minutes after the start of the academic session

The beadle enters the auditorium, walks onto the podium and strikes the floor one time with the mace before speaking the words out loud: "Hora est". The Rector Magnificus ensures that any continuing discussion or argument is completed, including its defence, and adjourns the meeting with the words: "I adjourn the meeting; the thesis committee will now withdraw for consultation." Preceded by the Beadle, the committee leaves the auditorium in ceremonial procession and returns to the meeting room. If an opponent was present at the ceremony via a video connection, this opponent will join these deliberations via another video connection.

The thesis committee decides whether to confer the degree of doctor whereafter the Rector Magnificus, promotor(s) and co-promotor(s) sign the diploma. A decision to withhold the conferral of the degree on the grounds of the candidate's defence must be based on the negative judgement of three of the voting thesis committee members. The committee then discusses the quality of the thesis, using the previously sent thesis assessment forms. The Rector Magnificus provides an overview of the evaluations after which the promotor makes an initial proposal for the assessment of the quality of the dissertation. Then the Rector Magnificus asks the opponents if they agree with the assessment of the promotor(s) and a discussion follows among the thesis committee members. After a decision has been made, about the assessment of the thesis and propositions, the Rector Magnificus asks the promotor(s) to make an initial proposal for the assessment of the quality of the defence. Then the opponents are asked if they agree with this assessment followed by a discussion among the thesis committee members. In case the committee does not reach a unanimous

decision regarding the quality of the thesis and propositions or the defence, the Rector Magnificus will register the lowest qualification as the final assessment. After the discussion and decision, the Rector Magnificus records the final assessments by the committee in the promotion book.

- 60 minutes after the start of the academic session The thesis committee enters the auditorium in ceremonial procession, and all members take their places as before.

The Rector Magnificus reopens the meeting and announces the decision that the thesis committee has taken on behalf of the Academic Board with the following words: "I hereby re-open this meeting. The Academic Board of Wageningen University, represented by the Rector Magnificus and *<number>* committee members appointed by the Academic Board, having noted the content of a thesis, entitled '*<title of the thesis>'* with propositions, having heard the defence of that thesis, has decided to confer the degree of doctor on: *<name of PhD candidate>*, born in *<city of birth>* on *<birthdate>* and to grant to *<name of PhD candidate>* all rights and privileges ensuing from that doctorate by law and custom."

(In case the degree is awarded cum laude, the following is added: "Moreover, due to the exceptional capability in the independent practice of science shown by the candidate, the designation 'cum laude' is attached to this degree.") "The Academic Board assumes that you accept your duty as a scientist to execute your future research ethically and with due diligence according to the Netherlands Code of Conduct for Research Integrity. I now invite the promotor <name> to present the candidate with the degree."

The promotor invites the new doctor to sign the diploma with the following words: "You have heard the decision of the Academic Board of Wageningen University to confer on you, <name PhD candidate>, the degree of doctor. It is now my honour to present you with the degree, signed by the (deputy) Rector Magnificus, the promotor(s)and the co-promotor(s), and sealed with the Great Seal of Wageningen University. I first invite you to sign the degree as well. With this signature, you declare to act according to the Netherlands Code of Conduct for Research Integrity in the future."

The Beadle allows the new doctor to sign the diploma whereafter it is handed to the promotor who will officially present the candidate with the diploma. The promotor will then continue the ceremony with the words: "Allow me, (deputy) Rector Magnificus, to offer my congratulations and to add a personal address." The congratulations and personal address last no more than five minutes in total and are business-like and constructive in tone. The grade of the thesis and defence will be mentioned only in case of cum laude.

Thereafter the promotor gives the floor back to the Rector Magnificus with the words: "I hereby give the word back to the (deputy) Rector Magnificus", the Rector Magnificus congratulates the new doctor on behalf of the university, acknowledges the contributions of the members of the thesis committee, and thanks the audience for their presence before closing the meeting. The committee leaves the auditorium in ceremonial procession, followed by the new doctor and the paranymphs.

After the close relatives have congratulated the new doctor, the promotor(s) and co-promotor(s) are the first to get the opportunity to offer their congratulations.

## Addendum appendix 6 Deviations from the Doctoral Degree Regulations in case of national or international force majeure situations

In exceptional national or international circumstances that qualify as a force majeure situation and that prevent or hinder public defences at the Omnia Auditorium of Wageningen University, such asthe COVID-19 pandemic, the thesis defence ceremony may deviate from the ceremony as set out in Appendix 7 of the Doctoral Degree Regulations. If, in the opinion of the Academic Board, measures taken due to such exceptional circumstances give reason to do so, a "public defence" or "public meeting" as referred to in the Doctoral Degree Regulations will not take place in the Omnia Auditorium of Wageningen University, but online. An online defence will be recorded and broadcasted live and will remain accessible to the public online at <a href="Wageningen University and Research Media Library">Wageningen University and Research Media Library</a> (yuja.com).

If the Academic Board decides that the public defence of a particular dissertation will take place online, this will have consequences for the application of at least the following articles and appendices of the Doctoral Degree Regulations: articles 16.1, 16.2, 16.4, 16.5, 16.6 and 17.2, and appendices 3 and 8. Where in Appendix 7 reference is made to a "private meeting" or "closed meeting", an "online meeting" will be held. This has consequences for the application of at least the following articles of the Doctoral Degree Regulations: 17.1, 17.2, 18.4, 18.5.

Where reference is made to the protocol in Appendix 7, this will be the protocol as explained in an addendum to Appendix 7 as shown below. This concerns article 16.4 of the Doctoral Degree Regulations.

At the time of such exceptional circumstances, an amended protocol can be used. In agreement with the PhD candidate, the defence will take place via an online connection. The private meeting will also take place online. A digital beadle will ensure that the protocol is followed as closely as possible and see to it that the opponents are (also) able to discuss with the candidate from a distance. The defence will be broadcast live on <a href="Wageningen University and Research Media Library (yuja.com)">Wageningen University and Research Media Library (yuja.com)</a> and will remain accessible online to the public on that web page.

In case the PhD candidate is unable or unwilling to defend the thesis online, a new date will be sought for a defence in the Omnia Auditorium.

#### Appendix 7 Regulations for conferring a joint, double or dual doctorate

#### Introduction

Where the term joint doctorate (JD) is used, joint, double as well as dual doctorates with joint governance, joint admission and joint supervision of PhD candidates are meant. Thus, PhD programmes with joint governance, joint admission and joint supervision of PhD candidates, may issue either 'joint', 'double' or 'dual' degrees.

For all such joint programmes, irrespective of the terminology used for the degree, the regulations in this appendix 7 apply.

A proposal for a JD programme has to be submitted by the graduate school of the participating chair group(s) to the Academic Board and has to be approved before the start of the PhD projects.

The Academic Board approves a proposal for a JD programme based on the quality and complementarity of the partner institute(s), the balance of nationalities within the WU PhD programme, the coverage of the proposal in terms of number of PhD projects (in other words the programme should have more than one project) and the adherence to the WU Doctoral Degree Regulations.

All joint degrees are (also) registered as WU degree. A Dutch university however only receives payment for a PhD thesis if the defence took place within the Netherlands. In cases where the defence takes place outside the Netherlands, no payment from the Dutch government is awarded.

#### Types of joint doctorate proposals

Joint degree proposals can be submitted when it concerns a collaboration of one (or a few) chair group with one (or a few) research group at a partner institution, a collaboration that needs an approved joint doctorate programme to apply for funding, such as for an innovative training network (ITN) grant or a strategic collaboration of WU(R) with a partner institute laid down in an MoU with the wish to make it possible to confer joint degrees. The core of the JD programmes of the first and second type consist of a common scientific goal, framework or issue around which the PhD programme is organised. This constitutes the foundation of the programme and should, therefore, be clearly elaborated and agreed upon among programme partners. Participation of the graduate school or chair group (hereinafter: participant) in the programme should create added value in terms of achieving the scientific goals of the participant. Thus, the programme should fit into the strategy of the participant as well.

#### **Conditions for JD programmes**

- A JD programme should involve a number of projects in a set timeframe.
- A PhD candidate should stay at least one year at both partner institutes.
- The admission procedure should include agreements regarding proficiency in the English language and academic quality of the candidates. The admission procedure should be equal for all PhD

- candidates and meet the requirements of all partner universities.
- After the PhD defence, the candidate will receive two certificates, issued by WU and by the partner institution. An appendix to the certificate will state that the degree was awarded for a single thesis resulting from a joint doctoral programme of the partner institutions.
- An even distribution (a distribution reflecting the input from the institutions) of the defence ceremonies over the different locations should be strived for. When this is not the case argumentation should be given why a fair distribution cannot be reached.
- Setting up a joint doctorate programme minimally requires sufficient scientific quality of the partners.
- When more than two partners participate in a programme, it must be clearly defined before the start of the programme whether joint degrees are established with all partners or only with selected partners.
- All institutions involved in the joint PhD project should provide supervision. A joint supervision and training plan should be agreed on.
- The requirements regarding the thesis, propositions and defence should in any case meet the requirements set by Wageningen University for the regular (non-joint) degree or doctorate.
- There will be a single evaluation procedure for a PhD thesis and for the
  defence within a joint PhD programme. The thesis committee consists
  of at least four members next to the supervisors and includes at least
  one full professor from WU. The composition of the thesis committee
  must be approved by the Academic Board of both institutions.
  Modifications to the regular composition of the thesis committee might
  be requested to meet this approval. The title pages to be used for a
  joint thesis may deviate from the WU standard as indicated below.
- The JD programme should have sufficient funding.

#### Format for a JD programme proposal

The proposal for a JD programme should include the following headings:

### **1. Type of joint doctorate (tick one box):**Collaboration of one (or a few) chair gro

- □ Collaboration of one (or a few) chair group(s) with one (or a few) research group(s) at a partner institution.
  > Please complete sections 2 and 3.
- □ Collaboration that needs an approved joint doctorate programme to apply for funding, such as for an innovative training network (ITN) grant.

- > Please complete sections 2 and 3.
- ☐ Strategic collaborations of WU(R) with a partner institute laid down in an MoU with the wish to make it possible to confer joint doctorate degrees.
  - > Please complete section 3.

#### 2. Aim and content of the joint PhD programme

Involved chair group(s) from WU

Associated WU graduate school(s)

Intended start date of the programme

Intended end date of the programme

#### Name(s) partner institute(s):

When more than two partners participate in a JD programme, state whether the joint degree is established with all partners or only with selected partners from the programme.

Involved research group(s) partner institutes

#### Existing collaboration:

#### Common scientific goal, framework or issue

The core of the JD programme consists of a common scientific goal, framework or issue around which the PhD programme is organised. This constitutes the foundation of the programme and should, therefore, be clearly elaborated and agreed upon among programme partners. Participation of the graduate school or chair group (hereinafter: participant) in the programme should create added value in terms of achieving the scientific goals of the participant. Thus, the programme should fit into the strategy of the participant as well.

#### Number of intended PhD projects

A JD programme should involve a number of projects in a set timeframe.

#### Schedule of stay at the home institute and partner institute

A PhD candidate should stay at least one year at both partner institutes.

#### Planned joint activities

Such as joint courses as part of the joint doctorate programme.

#### Contribution to the international PhD classroom balance

Describe the effect that the joint degree programme will have on the balance of

nationalities in the WU PhD population.

#### Budget

Provide a budget plan for the JD programme with special attention to arrangements governing PhD reimbursements. A Dutch university receives payment for a PhD thesis only if the defence took place within the Netherlands. In cases where the defence takes place outside the Netherlands, no payment from the Dutch government is awarded. It is, therefore, important when planning a budget for a JD programme to take national rules concerning PhD thesis payments into account and include the agreements in a budget plan.

A fair distribution (a distribution reflecting the input from the institutions) of the defence ceremonies over the different locations should be strived for. When this is not the case argumentation should be given when a fair distribution cannot be reached.

#### 3. Format for Overall framework agreement per partner institute

The overall framework agreement needs to be set up once per partner institute. Please check whether an overall framework agreement already exists for your partner institute.

#### **Description of the partner institution(s)**

Describe the quality of the partner institution.

#### Admission procedure(s)

A description of the admission procedures for PhD candidates. The procedure should be equal for all PhD candidates and should contain agreements regarding proficiency in the English language and the academic quality of the candidates.

#### Supervision and training

Describe the agreements regarding the composition of the supervision teams, frequency of supervision, Go/No-go evaluation and intended training activities. Attach a format for the supervision and training plans. All institutions involved in the joint PhD project should provide supervision.

#### **Evaluation and defence**

#### **Propositions**

Regardless of the location of the defence, propositions have to be part of the PhD thesis.

#### Thesis evaluation

Describe a single evaluation procedure for all PhD theses and defences within the JD programme. Take the following into account when describing the procedure:

The promotor at WU is responsible for seeking approval from both institutions and will inform the secretariat for doctoral conferrals regarding an upcoming PhD defence, whether held at WU or at the partner institute as

early as possible but at least no later than 6 months before the scheduled defence date. The thesis and propositions must be approved by supervisors from both institutions before they can be sent to the thesis committee. The thesis committee consists of at least four members and includes at least one full professor from WU. The composition of the thesis committee must be approved by the Academic Board of both institutions. Modifications to the regular composition of the thesis committee might be requested to meet this approval.

#### Thesis design

Describe the intended thesis design including any deviations from the WU regulations. The title pages to be used for a joint thesis may deviate from the WU standard as indicated below.

#### Protocol PhD defence

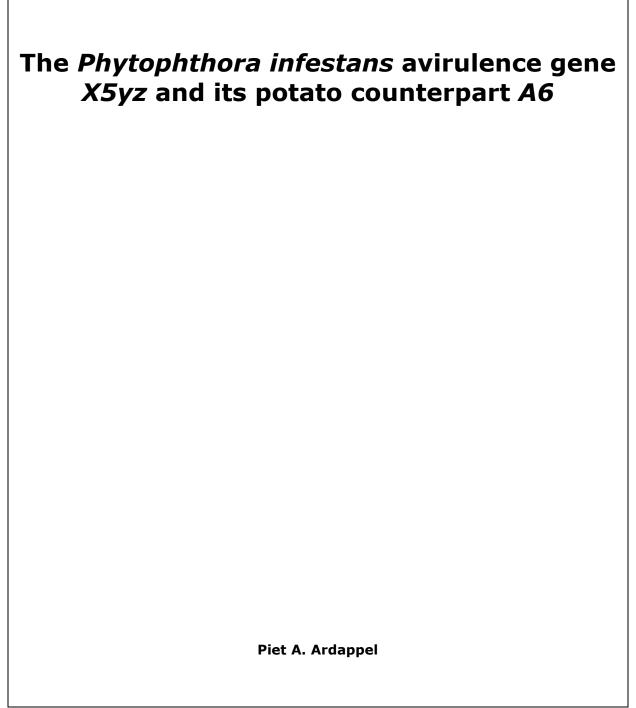
There will be a single PhD defence for a joint doctorate. For the PhD thesis defences the standard protocol of the institute where the defence takes place is followed.

The associated WU graduate school(s) should send the completed proposal to the Academic Board (<a href="mailto:academic.board@wur.nl">mailto:academic.board@wur.nl</a>) before the start of the JD programme.

## Required title pages for a joint PhD thesis defended at Wageningen University

If requested by the partner university, the thesis cover and/or the first title page may contain the logos of both universities.

First title page of a joint PhD thesis



(This is a fictional example)

#### Second title page of a joint PhD thesis

Professors with personal or special chairs must be explicitly indicated as such in the list of promotors. Their affiliation must also be listed.

The list of co-promotors must state their positions and affiliations.

The affiliation of WUR promotors and co-promotors consists of position (for chair holders "professor of", for personal professors "professor in", and for special professors "special professor in), their basic organisational unit (chair group or business unit) plus Wageningen University & Research as main affiliation. The other members (the opponents) are listed with their main affiliations. Affiliations outside the Netherlands must also include the name of the country.

#### Thesis committee

#### **Promotors**

Prof. Dr *ir*. F. Pietersen Professor in Phytopathology Wageningen University & Research

Prof. Dr *ir.* F. Swartjes Professor of Phytopathology Partner Institution

#### **Co-promotor**

Dr *ir*. P.A. Willis Associate professor in Animal Nutrition Wageningen University & Research

#### Other members

Prof. Dr W.J. Stekels, Wageningen University & Research

Dr P. de Groot, Partner Institution

Dr A. de Bruin, Keygene N.V., Wageningen Dr P. van Oost, University of Aberdeen, UK

This research was conducted under the auspices of the Graduate School of Partner Institution, Partner Country, and the Graduate School Experimental Plant Sciences, The Netherlands, and as part of the joint PhD programme NAME.

#### Third title page of a joint PhD thesis

Note that on this page 'Wageningen University' is used because that is the legal entity that issues the doctorate.

## The *Phytophthora infestans* avirulence gene *X5yz* and its potato counterpart *A6*

Piet A. Ardappel

#### **Thesis**

submitted in fulfilment of the requirements for the joint degree of doctor between **Partner Institution** 

by the authority of the Rector Magnificus, Prof. Dr Other Rector, and

#### **Wageningen University**

by the authority of the Rector Magnificus, Prof. Dr C. Kroeze, in the presence of the

Thesis Committee appointed by the Academic Boards of both universities to be defended in public on Wednesday 1 February 2025 at 3:30 p.m. in the Omnia Auditorium of Wageningen University.

(This a fictional example)

# Fourth title page of a joint thesis Note that on this page 'Wageningen University' is used because that is the legal entity that issues the doctorate. Piet A. Ardappel The Phytophthora infestans avirulence gene X5yz and its potato counterpart A6 83 pages. Joint PhD thesis, Partner Institution, Partner Country, and Wageningen University, Wageningen, the Netherlands (2025) With references, with summary in English DOI https://doi.org/10.18174/123456

(This is a fictional example)

The second to last page of a joint PhD thesis defended at Wageningen University is similar to Appendix 3c

The last inside page of a joint PhD thesis is similar to Appendix 3d.

The leaflet with the propositions of a joint PhD thesis is similar to Appendix 3e (in Pdf immediately after the cover).

### Appendix 8 Procedure and format request ius promovendi associate professors

Procedure request ius promovendi for associate professors 1 and 2 at Wageningen University as referred to in Article 5.3.1c and 5.3.1d

- The candidate prepares their portfolio and is personally responsible for the accuracy and completeness of the data.
- The ius promovendi request portfolio is identical to the ACF portfolio, but excluding the performance areas 'EDUCATION', 'SOCIETAL IMPACT' and 'ACADEMIC SERVICES'.
- The candidate demonstrates in their portfolio that they have supervised at least three PhD candidates from start to finish at Wageningen University or in a PhD program equivalent to that of Wageningen University. The portfolio also testifies that the candidate has followed the PhD supervision course or an equivalent course at another university.
- The candidate's chair holder checks the data in the portfolio and discusses the accuracy and completeness with the candidate.
- The candidate hands in the portfolio, including support letters from the chair holder and graduate school, to the Academic Board (mail to: <u>academicboard@wur.nl</u>). Deadlines for representing the portfolio to the Academic Board are 15 May and 15 November.
- A review committee, existing of three members of the Academic board, will assess the portfolio following the ACF criteria for associate professor 1 for the funding paragraph of the Personal profile and for the performance area 'RESEARCH'.
- The review committee will prepare an written advise to the academic board. The academic board will decide on awarding ius promovendi to the candidate.